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## Study of explosive strength midst bowler and batsman

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### Abstract

Purpose of this study was to find out the difference of explosive strength midst bowler and batsman. The sample (*viz.*, N=36) for the current study is branded into the subsequent groups: Group-A: Bowler ( $n_1=18$ ) and Group-B: Batsman ( $n_2=18$ ). An independent samples *t* test was used to analyze. In all the analyses, the 5% critical level ( $p \leq 0.05$ ) was considered to indicate statistical significance. The mean & standard deviation of bowler was 27.2778 & 5.7374, whereas the mean & standard deviation of batsman was 27.4444 & 6.2518. The *t*-value is 0.0833. The result is not significant at  $p < .05$ .

**Keywords:** explosive strength, bowler, batsman

### Introduction

It is generally accepted that physical activity confers benefits to psychosocial health, functional ability and general quality of life [1] and has been proven to reduce the risk of coronary heart disease [2] and some cancers [3]. Here, physical activity refers to 'any bodily movement produced by skeletal muscles that results in energy expenditure' [4].

Conditions associated with physical inactivity include obesity, hypertension, diabetes, back pain, poor joint mobility and psychosocial problems [5-7]. Physical inactivity is a major public health challenge in the developed world and is recognized as a global epidemic [8]. Within the United States, the rate of childhood obesity is expected to reach 40% in the next two decades [9] and Type 2 diabetes is expected to affect 300 million people worldwide within the same time [10].

### Material and Methods

#### Explosive Strength (Vertical Jump Test)

- **Purpose:** To measure your explosive of leg lower.
- **Equipment Required:** Measuring Tape, Marked Wall, Chalk for Marking Wall.
- **Procedure:** the athlete stands side on to a wall and reaches up with the hand closest to the wall. Keeping the feet flat on the ground, the point of the fingertips is marked or recorded. This was called the standing reach height. The athlete then stands away from the wall, and leaps vertically as high as possible using both arms and legs to assist in projecting the body upwards. The difference in distance between the standing reach height and the jump height was the score. The best of three attempts were recorded.
- **Scoring:** The jump height was usually recorded as a distance score.

### Sample

The sample (*viz.*, N=36) for the current study is branded into the subsequent groups:

- Group-A: Bowler ( $n_1=18$ )
- Group-B: Batsman ( $n_2=18$ )

### Statistics

The researcher used Statistical Package for the Social Sciences (SPSS) to compute the data of this study. An independent samples *t* test was used to analyze. In all the analyses, the 5% critical level ( $p \leq 0.05$ ) was considered to indicate statistical significance.

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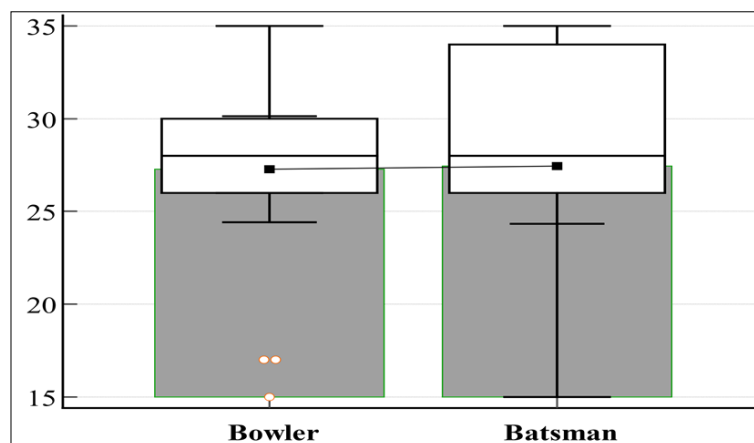
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## Results

**Table 1:** Comparison matrix of explosive strength balance between bowler and batsman

	<b>Bowler</b>	<b>Batsman</b>
Sample size	18	18
Arithmetic mean	27.2778	27.4444
95% CI for the mean	24.4246 to 30.1309	24.3355 to 30.5534
Variance	32.9183	39.0850
Standard deviation	5.7374	6.2518
Standard error of the mean	1.3523	1.4736
F-test for equal variances		P = 0.727
Difference		0.1667
Pooled Standard Deviation		6.0001
Standard Error		2.0000
95% CI of difference		-3.8979 to 4.2312
Test statistic t		0.0833
Degrees of Freedom (DF)		34
Two-tailed probability		P = 0.9341



**Fig 1:** Graphical comparison matrix of Explosive Strength balance between bowler and batsman

### Explosive Strength

Table-1 illustrates that the mean & standard deviation of bowler was 27.2778 & 5.7374, whereas the mean & standard deviation of batsman was 27.4444 & 6.2518. The t-value is 0.0833. The result is not significant at  $p < .05$ .

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